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October 31, 2005

CERTIFICATE OF THE SECRETARY OF ENVIRONMENTAL AFFAIRS ON THE ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME: Russell Biomass Power Plant
PROJECT LOCATION: Russell
EOEA NUMBER: 13635
PROJECT PROPONENT: Russell Biomass LLC
DATE NOTICED IN MONITOR: September 24, 2005

Pursuant to the Massachusetts Environmental Policy Act (M.G.L. c. 30, ss. 61-62H) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** the preparation of an Environmental Impact Report (EIR).

Project Description

As presented in the Expanded Environmental Notification Form (EENF), the project proposes the development of a 50-megawatt (MW) biomass-fired power plant, on 18 acres of a 70-acre parcel in Russell, MA. Approximately 509,000 tons of biomass wood fuel will be consumed annually to produce heat to drive the turbine to generate electricity. The energy generated from the facility will be transmitted to the existing electrical grid and the net annual energy production will be approximately 380,000,000 kWh. The energy generated by the plant will be conveyed via a new transmission line from the site, approximately 5.2 miles along an existing transmission line easement to connect with the existing 115 kV electrical transmission distribution line.

The plant will consist of a complete fuel receiving and handling system, a single fluidized bubbling bed boiler, a single condensing turbine, a mechanical draft evaporative cooling tower withdrawing water from the Westfield River via an existing intake structure, air and water

quality control systems, a distilled fuel oil boiler start up system, and auxiliaries typical of a stand alone power generating station.

A sizable portion of the site will be utilized for the stockpile of 20 to 30 days fuel storage to assure a continuous, adequate supply for the plant. Transportation of wood fuel to the site will necessitate approximately 75 deliveries via Main Street of Russell to supply the required 2,000 tons per day. Ash, the by-product from burning wood fuel, will be trucked from the site.

An existing municipal water main supplies potable water to the site. On site subsurface sewage disposal will be utilized to treat plant wastewater. A storm drain and stormwater management will be constructed on site to collect, detain and treat stormwater flows.

Site Description

The site consists of a large open area at the base of Shatterack Mountain in Russell, MA. Former paper mill buildings and infrastructure occupy the central portion of the site. Areas on the north end of the site not currently covered with buildings or pavement are primarily used for the temporary storage of timber products associated with the current Hull Forest Products lease on the site. Since 2000, there have also been gravel removal operations at the site. The site is bounded by industrial uses and vacant land. To the west, CSX active railroad tracks and the Westfield River bound the site. To the south, east and north the site is bounded by undeveloped forested land.

Jurisdiction

This project is undergoing environmental review and is subject to the preparation of a mandatory EIR pursuant to Sections 11.03 (1)(a)(1), 11.03 (2)(b)(2), 11.03 (3)(b)(1)(d), 11.03 (4)(b)(1), 11.03 (5)(b)(4)(b), 11.03 (7)(b)(1), 11.03 (8)(b)(1) and 11.03 (10)(b)(1) of the MEPA regulations for the following anticipated impacts:

- Direct alteration of 50 or more acres of land associated with the construction of the transmission line
- Rare species impacts in the Westfield River and associated with the transmission line corridor
- Alteration of more than 5,000 square feet (sf) of Bordering Vegetated Wetlands (BVW) as a result of retrofitting the existing transmission line
- Expansion in withdrawal of 100,000 or more gallons per day (gpd) of water from the Westfield River for cooling
- New surface water discharge of 20,000 gpd or more of industrial wastewater for cooling
- Construction of a new electrical generating facility with a capacity of 25 MW
- Construction of a new major stationary source with federal potential emissions, after construction and the imposition of require controls of: 100 tons per year (tpy) of particulate matter (PM) as PM10, carbon monoxide (CO), lead or sulfur dioxide (SO₂); 50 tpy of volatile organic compounds (VOC) or nitrogen oxide

- (NOx); 10 tpy of any hazardous air pollutant (HAP); or any 25 tpy of any combination of HAPs related to the proposed power plant emissions
- Demolition of all or any exterior parts of any historic structure listed in the Inventory of Historic Assets of the Commonwealth associated with the abandoned Mill.

The project requires the following permits and review: a Programmatic General Permit from the U.S. Army Corps of Engineers (ACOE); a National Pollutant Discharge Elimination System (NPDES) Construction General Permit and Notice of Intent for surface water discharge, an approved Stormwater Pollution Prevention Plan (SWPPP), and a Spill Prevention Permit for a fuel oil storage tank from the U.S. Environmental Protection Agency (EPA); a Stack Registration Permit from the Federal Aviation Authority (FAA); an Essential Fish Habitat (EFH) assessment from the National Marine Fisheries Service (NMFS); a Request for Interconnection for a Large Generating Facility from the Independent System Operator-New England (ISO-NE); Major Comprehensive Plan Approval, a Water Management Act (WMA) Permit, a Beneficial Use Determination (BUD), a Chapter 91 Waterways License, 401 Water Quality Certification, and an Industrial Holding Tank Permit from the Massachusetts Department of Environmental Protection (DEP); review by the Massachusetts Division of Fisheries and Wildlife (DFW) Natural Heritage and Endangered Species Program (NHESP); review by the Massachusetts Historical Commission (MHC); an Order of Conditions (OOC) from the Russell Conservation Commission, and hence a Superseding OOC from the DEP if the local Order is appealed; a Special Permit and Site Plan Review from the Russell Planning Board and Zoning Board of Appeals; and Septic System Approval from the Russell Board of Health.

While the project did receive funding for a feasibility study from the Massachusetts Technology Collaborative (MTC), the proponent is not seeking financial assistance from the Commonwealth for the construction or operation of the project and therefore MEPA jurisdiction is limited to the subject matter of required or potentially required state permits. In this case MEPA jurisdiction applies to land alteration, stormwater, rare species, wetlands, waterways, water withdrawal, wastewater, energy, air quality, solid and hazardous waste and historic resources.

Request for a Single EIR

In accordance with Section 11.05(7) of the MEPA regulations, the proponent has submitted an EENF with the request that I allow the proponent to fulfill its EIR obligations under MEPA with a Single EIR, rather than the usual process of a Draft and Final EIR. The request was presented within the EENF and was discussed at the MEPA public consultation session for the project held on October 12, 2005. The EENF and supporting documentation received an extended comment period pursuant to Section 11.06(8) of the MEPA regulations.

Section 11.06(8) of the MEPA regulations sets forth the following standards for an EENF, which is required for a Single EIR:

When issuing a Scope in accordance with 301 CMR 11.06(7), the Secretary shall ordinarily require a draft and final EIR but may allow a single EIR, provided that the

Secretary finds that the expanded ENF requesting a single EIR in accordance with 301 CMR 11.05(7):

- (a) describes and analyzes all aspects of the Project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope;
- (b) provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed; and
- (c) demonstrates that the planning and design of the Project use all feasible means to avoid potential environmental impacts.

While I acknowledge the proponent's efforts in developing the EENF, which contained considerable information that has been particularly helpful in understanding the project and its associated impacts, I find that the submittal does not meet the standards for a Single EIR at 301 CMR 11.05(7) and 11.06(8). The two-step EIR process is essential to resolving potential environmental impacts posed by significant projects like the Russell Biomass Plant, to ensure adequate public review and comment on project design and associated impacts, and to develop sufficient information for the Massachusetts permitting agencies to use in their permitting decisions. The EENF did not contain sufficient information describing and analyzing the project, its alternatives and environmental impacts, and mitigation measures as required for EENF submittals. I am therefore denying the proponent's request for a Single EIR. The Scope for the Draft Environmental Impact Report (DEIR) is laid out in detail below. Should the DEIR fully resolve the substantive issues outlined in the Scope, I will consider the procedural options available to me at 301 CMR 11.08 (8)(b)(2), as they may related to the Scope for the Final EIR.

The Commonwealth of Massachusetts has a commitment to significantly increase the production of environmentally sensitive renewable energy. New England is nearly totally dependent on fossil fuels, natural gas in particular, for electric power generation. The lack of indigenous fuel supplies in the region makes the Commonwealth vulnerable to fuel supply disruptions and price volatility. Projects such as the proposed Russell Biomass plant help to address needs for new electric generating capacity and fuel diversity in New England. The Massachusetts Division of Energy Resources has issued an Advisory Ruling (April 7, 2005) that qualifies the Russell Biomass project under the Massachusetts Renewable Energy Portfolio Standard.

Nonetheless, no matter how worthy a potential project may be, MEPA imposes a requirement on project proponents to understand and fully disclose the potential impacts of a project, both positive and negative; to study feasible alternatives to a project; and to avoid, reduce, or mitigate environmental impacts to the maximum extent feasible. The siting of biomass plants must be done carefully, taking a number of factors such as topography, wind directions, watersheds and population densities into account. I intend to conduct a rigorous review of environmental impacts, as laid out in this Certificate. As Secretary of Environmental Affairs, I have a duty to ensure that that the MEPA review lays the foundations for a project that is well-planned, well-studied, and well-executed.

I cannot approve or deny this project through the MEPA process. MEPA is not a zoning process, nor is it a permitting action. Rather, it is a process designed to ensure public

participation in the state environmental permitting process, to ensure that state permitting agencies have adequate information on which to base their permit decisions and their Section 61 Findings, and to ensure that potential environmental impacts are described fully and avoided, minimized, and mitigated to the maximum feasible extent.

SCOPE

General

The DEIR should follow the general guidance for outline and content contained in Section 11.07 of the MEPA regulations, as modified by this Scope. The DEIR should contain a copy of this Certificate, and a copy of each comment received. The proponent should circulate the DEIR to those parties that commented on the EENF, to any state agencies from which the proponent will seek permits or approvals, and to any parties specified in Section 11.16 of the MEPA regulations. A reasonable number of copies of the DEIR should be made available for public review at the Russell Public Library and Russell Town Hall.

Project Description and Permitting

The DEIR should briefly describe each state permit or agency action required for the project, and should discuss how the project meets the performance standards associated with the various permits. The DEIR should provide sufficient detail for the state permitting agencies to make informed permitting decisions, and otherwise meet their Section 61 obligations. I also encourage the proponent to include similar information for federal permits and regulations as well. In accordance with Executive Order (Planning for Growth) and Section 11.01(3)(a) of the MEPA regulations, the DEIR should discuss the consistency of the project with the local and regional growth management and open space plans.

The DEIR should also provide an update on the status of required local permits from both the Town of Russell and the City of Westfield. The proponent should use the DEIR to reconcile inconsistencies about the nature of the fuel source for the proposed project. The Special Permit issued to the proponent by the Town of Russell Planning Board on June 28, 2005 states that the "Applicant will not be allowed to burn anything other than Virgin Wood" (emphasis in original), which is defined in the permit as: "pre-consumer wood taken directly from its point of growth including wood resulting from logging, tree thinning, lot clearing, brush removal, bark, wood chips and shavings as a fuel. Specifically excluded is all post-consumer wood and wood products included, but not limited to, painted wood, pressure treated wood, wood pallets, wood pulp or recycled paper, Construction and Demolition, Clean Recycled Waste and Paper Cubes". The EENF states that the primary fuel for the plant will be clean "wood fuel" in chip form as defined by DEP in 310 CMR 7.00, which excludes any wood that is chemically treated or contaminated with any preservative, paint or oil. The DEP definition is less conservative than the definition of "virgin wood" outlined in the Town of Russell Special Permit.

The proponent should note that DEP and MEPA are reviewing the EENF and any future permits required for the project with the understanding that the only wood fuel proposed for this

project will be derived from clean by-products of the forest industry. DEP has stated in its comments that the use of other sources of wood-derived fuel will require re-evaluation of the subject project. Furthermore, should the proponent choose to deviate from the fuel source specified in the Special Permit, or in any other way from the project as proposed in the EENF, the proponent will be required to file a Notice of Project Change (NPC) pursuant to Section 11.10 of the MEPA regulations and may undergo further environmental review. The proponent should also provide information about any request to the Massachusetts Department of Telecommunications and Energy (DTE) for an exemption from local rule, and any implications that this exemption would have on project permitting, design and impacts.

The DEIR should also provide a discussion of the amount of clean wood that is actually available for biomass facilities in New England. If reasonably available supplies are exceeded, the proponent must demonstrate that it can meet the fuel needs of the proposed plant without excessive or damaging harvesting techniques and without negating the provisions in the Special Permit and in DEP requirements with regard to fuel source. Furthermore, the DEIR should provide a discussion of how fuel quality will be measured and documented prior to incineration.

At the time of the EENF submittal, a steam turbine had not been selected and the design of the steam cycle and associated cooling equipment had not yet been completed. The DEIR should provide an update on project design and equipment selection so that an accurate analysis of project impacts can be undertaken.

Alternatives

The DEIR shall present a comprehensive alternatives analysis. The alternatives analysis should clearly demonstrate consistency with the objectives of MEPA review, one of which is to document the means by which the proponent plans to avoid, minimize or mitigate Damage to the Environment to the maximum extent feasible. The DEIR should fully explain any trade-offs inherent in the alternatives analysis, such as increased impacts on some resources to avoid impacts to other resources.

The analysis of alternatives in the EENF focuses solely on site access and does not discuss alternatives that would avoid or minimize adverse effects to the Westfield River. In addition to a Preferred Alternative and a No-Build Alternative, the DEIR should evaluate alternative site designs and technology in order to ascertain which alternative minimizes overall impacts to land, wetlands, rare species and sensitive receptors. The DEIR should also consider a smaller facility with the goal of minimizing impacts to the river. The DEIR should examine a range of alternatives that address intake and discharge structure siting, as well as technical modifications such as a substratum intake structure and the use of alternative cooling techniques that recirculate cooling water or use air-cooling.

The proponent has also verbally indicated that an adjacent parcel of land has been purchased that may provide alternative access to the site. The DEIR should examine this alternative and its impacts to those environmental issues within MEPA jurisdiction.

The EIR should incorporate any alternatives analysis required by the 401 Water Quality Certification process, and any other alternatives analysis required for state permitting purposes.

Land Alteration & Stormwater

The project as presented in the EENF will result in the creation of 2.4 acres of new impervious area and the alteration of more than 50 acres of land, mainly in the form of vegetation removal and management for the electric transmission line corridor. The main impacts associated with the transmission line related to wetlands and habitat and are addressed in other sections of this Certificate.

The EENF provided a discussion of existing drainage conditions at the site. The proponent submitted a drainage report as part of the Special Permit Site Plan Review, and will be required to demonstrate how the project meets the requirements of the DEP Stormwater Management Policy and the NPDES program.

The DEIR should present drainage calculations and detailed plans for the management of stormwater from the proposed project. It should include a detailed description of the proposed drainage system design, including a discussion of the alternatives considered along with their impacts. The DEIR should identify the quantity and quality of flows for the 10, 25 and 100-year storm events.

The DEIR should address the performance standards of DEP's Stormwater Management Policy and the consistency of the project with the provisions of the NPDES General Permit from the EPA for stormwater discharges from construction sites. The DEIR should include discussion of best management practices employed to meet the NPDES requirements, and should include a draft Pollution Prevention Plan. In addition, a maintenance program for the drainage system will be needed to ensure its effectiveness. This maintenance program should outline the actual maintenance operations, sweeping schedule, responsible parties, and back-up systems.

Proposed activities, including construction mitigation, erosion and sedimentation control, phased construction, and drainage discharges or overland flow into wetland areas, should be evaluated. This analysis should address current and expected post-construction water quality of the predicted final receiving water bodies. Sufficient mitigation measures should be incorporated to ensure that no downstream impacts would occur. The drainage analysis should ensure that on- and off-site wetlands are not impacted by changes in stormwater runoff patterns.

Rare Species

The proponent has stated that no rare plant or animal species have been mapped or identified on the site proper. Downstream of the site on the Westfield River, NHESP has indicated that habitat exists for the Creeper (*Strophitus undulatus*), a freshwater mussel that is a Species of Special Concern. Work within the Westfield River will be required to rehabilitate the existing intake structure and drainage discharge pipe. The intake structure is located upstream of the existing dam structure and the mapped Creeper habitat. The EENF states that the existing and proposed drainage discharge pipe is located below the dam structure, but in a reach of the

river with a bedrock substrate devoid of Creeper habitat. A survey of mussel habitat was performed up and downstream of the dam in 2004 that concluded that the stretch of the Westfield River in the vicinity of the project site has a substrate that is unsuitable for the Creeper. The proponent states therefore that no negative impacts to Creeper habitats are anticipated from the discharge from the plant.

Comments from NHESP indicate, however, that the proposed project has the potential to adversely affect the Creeper mussel and its habitat by altering the water quality, thermal regime and hydrology in the Westfield River. The proponent should demonstrate in the DEIR that the project will not adversely affect the actual habitat of the Creeper mussel (310 CMR 10.58(4)(b)). In order to do so the proponent should, based on field survey and assessments, map the extent of Creeper habitat downstream and in the vicinity of the proposed plant water intake and discharge points. The proponent should then perform an analysis of the potential impacts of water withdrawal and discharges on the Creeper and its habitat. The proponent should refer to specific comments from NHESP with regard to the methodology used to calculate the impacts of water withdrawal and the proposed thermal discharge.

In addition, the following protected rare species occur in the area of the electric transmission line corridor:

- Spiked False-Oats (*Trisetum triflorum ssp. molle*) – Endangered
- Smooth Rock-Cress (*Arabis laevigata*) – Threatened
- Northern Bog Violet (*Viola nephrophylla*) – Endangered
- Eastern Box Turtle (*Terrapene carolina*) – Special Concern

The proponent has conducted terrestrial habitat evaluations and plant inventories in the transmission line easement between June and September of 2005. The EENF included the survey findings and presented comments on potential impacts to rare species.

NHESP has indicated that the proposed project has the potential to result in a “take” of state-listed rare species in the vicinity of Mount Tekoa, as a result of the proposed clearing for the transmission line in this area. The proponent should arrange a consultation with NHESP staff to discuss minimization and mitigation of rare species impacts associated with the transmission line. A project resulting in a “take” of a state protected rare species may only be permitted if it meets the permitting requirements for a Conservation and Management Permit (321 CMR 10.23). The DEIR should provide a discussion of the proponent’s coordination with NHESP and should outline how the project will meet the performance standards of any NHESP permitting requirements.

The DEIR should also discuss whether additional state protected rare species that are known to be present in the Town of Russell, such as the Upland sandpiper (*Bartramia longicauda*), the Peregrine Falcon (*Falco peregrinus*) and the Climbing Fumitory (*Adlumia fungosa*), will be impacted by the project.

The entire Westfield River is designated by the National Oceanic and Atmospheric Administration (NOAA) as Critical Habitat for Atlantic Salmon. The NMFS has indicated that the project will require an expanded EFH assessment in conjunction with permits required under the EPA Clean Water Act (CWA). The proponent should review comments from NMFS with regard to the required contents of an expanded EFH assessment and provide a discussion in the DEIR of how the project will meet the standards of the CWA permitting process and the EFH assessment.

Wetlands

The EENF states that the project will result in impacts to 7,000 sf of BVW in the transmission line easement. Work associated with the intake structure and drainage outlet will also result in impacts to Land Under Water and/or Bank. Some vegetation management will be required in the Riverfront Area of Shatterack Brook and Moose Meadow Brook as the transmission line corridor is re-established and utility poles are installed.

The DEIR should include plans that clearly delineate all applicable resource area boundaries on the project site and in the transmission corridor area including Riverfront Areas, buffer zones, 100-year flood elevations, priority and/or estimated habitat, and the delineation of the Mean Annual High Water Line on all perennial rivers. The DEIR should quantify the project's estimated impact on each resource area. It should describe the nature of all likely impacts that cannot be avoided, including crossings, grading, overstory clearing and construction-related disturbances and whether they are temporary or permanent in nature.

The DEIR should respond to comments from the DEP on wetlands and provide further information how the project will meet the performance standards of the Massachusetts Wetlands Protection Act (310 CMR 10) and the Clean Water Act (314 CMR 9.00). The proponent should also address comments related to the project site's qualification as historically exempt under 310 CMR 10.04.

Waterways

The proponent should provide further detail on the reconstruction of the intake and outtake structures and should discuss whether a Chapter 91 Waterways License will be required for the project. If a Chapter 91 License is required, the DEIR should demonstrate that the project would meet DEP's standards for a water dependent use.

Westfield River Impacts

Numerous significant concerns have been raised about the impacts of the project's proposed water withdrawals and discharges to the Westfield River that must be addressed in the DEIR. Many commenters speak to the importance of the Westfield River and its scenic, habitat and recreational resources and to the importance of the river's watershed in contributing to water quality in 24 cities and towns in Franklin, Hampshire, Hamden and Berkshire counties. The Department of the Interior has designated portions of the river located above the proposed

project as part of the National Wild and Scenic River System. The Nature Conservancy has also highlighted the Westfield River watershed as an ecoregional priority for conservation.

The river supports abundant fishery resources and other aquatic life. The East, West and Middle branches of the river and most of their tributaries provide habitat for native brook trout. The three branches and 22 tributaries are stocked annually with Atlantic salmon fry as part of a multi-state, multi-agency Atlantic Salmon Restoration Program. The entire Westfield River is designated by the National Oceanic and Atmospheric Administration (NOAA) as Critical Habitat for Atlantic Salmon. NOAA has also indicated that the diadromous American shad and Sea lamprey are expected to be present in the river. NHESP has stated that the section of the river bordering the project site clearly supports cold-water fish; the Westfield Paper Company impoundment is stocked annually with trout by the DFW and DFW fish surveys above and below the project site have found trout and juvenile Atlantic salmon. The American eel is also present at the site.

Given the importance of the Westfield River's aquatic resources, the proponent should address the following issues with regard to water withdrawals and discharge in the DEIR.

Water Withdrawals

The proposed project will use an existing municipal water system connection to provide potable drinking water to the site. Water used for a proposed non-contact cooling water system will be withdrawn from the Westfield River via an existing intake structure. Under a quitclaim deed that was recorded at the Hampden County Registry of Deeds in January 2000 (Book 11083, Page 22), Westfield Paper Lands, LLC was granted rights to withdraw 600,000 gpd of water from the Westfield River. The proposed project will require an estimated 662,000 gpd on average and a maximum of 885,000 gpd to accommodate site operations. The project will require a new Water Withdrawal Permit from the DEP.

The EENF states that an analysis using the U.S. Geological Survey Streamstats program indicates that the proposed withdrawal of a maximum 885,000 gpd represents approximately 4% of the 7Q10 flow (the lowest consecutive seven day stream flow that is likely to occur in a ten year period) and approximately 2.5% of the 50 percent August Median flow. The proponent states that based on this analysis and guidance from DEP on "Site Screening for Siting a New or Expanded Public Water Supply" that the proposed withdrawals will not have a significant impact on the river.

The following comments related to water withdrawals should be addressed in the DEIR:

- The proponent should respond to comments from the MA Riverways Program with regard to the project site's permitted water withdrawals under the Water Management Act (WMA).
- In its consideration of the WMA permit, the DEP will require an extensive amount of information including an analysis of alternatives to the withdrawal, evaluation of legal limitations to the withdrawal, and an analysis of potential impacts to the environment, rare species, and economic development. The

proponent should demonstrate in the DEIR how the project will meet the performance standards of the WMA.

- Analysis of the impacts of water withdrawal should assume a baseline condition of no water withdrawal, not just the increase from the deeded 600,000 gpd. Impacts should be compared to measures of the lowest flow day – the proponent should refer to comments from NHESP for guidance.
- The DEIR should make it clear that proposed water withdrawal figures are consumptive use (evaporation) only, and that the actual withdrawal includes this number plus the amount returned to the river.
- The DEIR should outline in detail work that will be needed to rehabilitate the existing intake structure. The proponent should discuss measures that will be taken to avoid fish entrainment and impingement at the intake structure.
- The DEIR should discuss the zone of influence associated with the intake over the range of water levels in the impoundment to determine potential impacts to aquatic species.

Wastewater

The proposed project includes the installation of an electrical generation system with a bubbling fluidized bed boiler that requires water for cooling operations. Water will be withdrawn from the Westfield River for cooling tower make up water. The overall annual average water rate is expected to be 662,000 gpd with discharge of treated water back to the river of 101,000 gpd. The return water will be discharged via the drainage pipe that exists as part of the mill complex. The discharge flow will be warmer than the river water withdrawal. A NPDES Surface Water Discharge permit will be sought jointly from the EPA and the DEP. The permit will identify the maximum discharge temperature, an acceptable pH range and an acceptable phosphate range for the discharge water. The DEIR should address the following concerns with regard to wastewater:

- The location of the proposed discharge should be clearly explained and detailed on plans. The location of the discharge compared to the outflow from the hydro plant should be outlined.
- The proponent should discuss whether the wastewater will be re-oxygenated before discharge.
- The DEIR should discuss the chemical nature of the cooling water that will be returned to the river. The EENF stated that the discharged water will have a different DO, pH, alkalinity and hardness, and will contain various chemicals added for corrosion, scale and microbial control. The DEIR should include a detailed discussion of the chemical nature of the discharge water (pH, DO, alkalinity, hardness, nature and concentration of additive such as phosphate and biocides) and how this will affect the chemical nature and biological community of the receiving water. The DEIR should also address the quantity and chemical composition of particulates in the wastewater and whether any mercury will be contained in the discharge.
- The DEIR should study the normal seasonal temperature regime of the Westfield River in the vicinity of the project site in order to provide a baseline from which a scenario of allowable increases can be derived.

- The DEIR should contain an analysis to determine the impact of the proposed thermal outfall on the aquatic community in the project area particularly during the summer low-flow period. The proponent should demonstrate how the proposed mixing zone located below the Westfield Paper dam will not adversely affect the migration of juvenile American eels through the elver ladder which has been mandated as part of the renovation of the hydroelectric dam.
- Following comments from NHESP, the DEIR should include an analysis of the effects of the proposed spray aeration system on the post-cooling retention pond. Additional detail should be provided on the pond; if the pond is not lined, it will require a Groundwater Discharge permit from the DEP.
- The DEIR should discuss whether the discharge will serve as an attractant, especially to anadromous fish trying to make their way upstream.
- The DEIR should discuss whether the discharge has the potential to induce or increase erosion or scour within the impoundment.
- The DEIR should address comments from the MA Riverways Program with regard to the dilution factor of the river at the discharge point.

Energy/Air

The proposed plant will generate 50 MW from a steam turbine generator powered by a low emission 740 MMBtu/hour Bubbling Fluidized Bed (BFB) boiler burning wood fuel. The maximum fuel-firing rate on wood fuel is 143,446 lb/hour. The secondary fuel is low-sulfur distillate oil needed for cold and hot start-ups of the boiler and for flame stabilization during operations with wood fuel.

The EENF states that while the Biomass plant will generate air emissions as a result of burning wood fuel, the plant has a low-emissions design that incorporates the best air pollution control technology. Potential emissions from the plant are greater than DEP's major source thresholds for nitrogen oxides (NO_x) and CO, and thus the facility requires a Major Comprehensive Plan Approval (CPA) from DEP and will be subject to the Massachusetts Operating Permit Program. In addition, the Project is subject to regulatory review under the New Source Review regulations for the non-attainment pollution zone because potential NO_x emissions are above 50 tpy.

In accordance with DEP regulations, emissions from the proposed biomass boiler will be representative of the Best Available Control Technology (BACT) for all pollutants except for NO_x for which the Lowest Achievable Emission Rate (LAER) applies. The low emission design of the plant includes a fabric filter baghouse and Selective Catalytic Reduction (SCR) control system to control particulate and emissions. These controls represent BACT and LAER for the facility. The air quality dispersion modeling exercise provided in the EENF provided emission factors for various pollutants that represent the maximum emission rates after application of BACT and LAER. The EENF states that the dispersion modeling performed for the project demonstrates that the proposed plant will not have an adverse impact on air quality. DEP will confirm conformance with LAER, BACT and the derivation of the emission factors during its review of the plan approval application.

The proponent should address the following issues with regard to air quality in the DEIR:

- The DEIR should present a refined air modeling analysis that takes into account meteorological data in the vicinity of the project site. Many concerns have been raised about the topography of the site and surrounding areas, and the high potential for inversion at the site. The modeling should be accompanied by plume maps showing concentration contours to provide a better understanding about the location and magnitude of air impacts. The analysis should also consider the potential deposition of heavy metals as a result of the project.
- The DEIR should address concerns with regard to fogging associated with the plant's cooling tower.
- The DEIR should discuss whether the project meets applicability thresholds under the federal Prevention of Significant Deterioration (PSD) program.

Solid and Hazardous Waste

The DEIR should disclose whether any known or suspected contamination exists on the site, and include a status update on any site remediation pursuant to the Massachusetts Contingency Plan. The DEIR should provide further information on the location and method of proposed fuel storage. The proponent should develop a hazardous materials management plan that includes provisions that protect against accidental damage, leakage or vandalism and spill containment and clean-up procedures.

The DEIR should include information that will be included in the Beneficial Use Determination (BUD) application to DEP with regard to the use of the ash for land application.

Historic Resources

The Westfield River Paper Company is included in MHC's Inventory of Historic and Archaeological Assets of the Commonwealth. MHC has indicated that at this time it is unable to determine what effect the proposed project will have on historic properties. Following comments from the Commission, the proponent should submit additional information including complete photographic coverage of the existing paper mill that will help in assessing the integrity of the structure, elevations and any perspective views indicating the proposed site conditions.

The proponent should also address concerns raised by the Pioneer Valley Planning Commission and the Jacob's Ladder Trail Scenic Byway Committee about the potential impact of the new chimney, power lines and metal building on the existing historic district and scenic byway.

Construction Period Impacts

The DEIR should include a discussion of construction phasing, evaluate potential impacts associated with construction activities, and propose feasible measures to avoid or eliminate these impacts. The proponent must comply with DEP's Solid Waste and Air Quality Control regulations. The proponent should implement measures to alleviate dust, noise and odor nuisance

conditions which may occur during the construction activities. The DEIR should outline measures that the proponent will take during the construction period to minimize negative impacts to the nearby Westfield River.

Mitigation

The DEIR should include a separate chapter on mitigation measures. The chapter on mitigation should include a Draft Section 61 finding for all state permits. The Draft Section 61 findings should contain a clear commitment to mitigation, an estimate of the individual costs of proposed mitigation, and the identification of parties responsible for implementing the mitigation. A schedule for the implementation of mitigation, based on the construction phases of the project, should also be included.

Response to Comments

The DEIR should respond to the comments received, to the extent that the comments are within MEPA jurisdiction. Each comment letter should be reprinted in the DEIR. The DEIR need not reproduce every form letter; however, the DEIR should include one "template" example of each category of form letter identified. I defer to the proponent as it develops the format for this section, the Response to Comments should provide clear answers to questions raised in both agency and public comment. The DEIR should present additional narrative and/or technical analysis as necessary to respond to the concerns raised.

October 31, 2005

Date


Stephen R. Pritchard, Secretary

Comments received:

10/5/2005	Carol Nummy
10/5/2005	Dale Oleksak
10/5/2005	David R. Fuller
10/6/2005	Christopher Davis
10/6/2005	Laurie Protono
10/9/2005	Henry Euler
10/11/2005	Henry Euler
10/11/2005	Henry Euler
10/12/2005	Janice Malcovsky
10/12/2005	Joseph Malcovsky
10/12/2005	Henry Euler
10/13/2005	Water Supply Citizens Advisory Committee
10/13/2005	Sarah Underwood
10/13/2005	Brian Tarris
10/13/2005	Viola A. Pierce

10/13/2005	Pjil & Ellen Shaw
10/14/2005	John & Theresa Brequet
10/14/2005	Catherine Moran
10/14/2005	Stuart A. Dunski
10/14/2005	Paul LaPrise
10/14/2005	Richard Allard
10/14/2005	Margaret R. Bennett
10/14/2005	Brian Janik
10/14/2005	Philip T. Winterson
10/14/2005	Bruce Anderson
10/14/2005	Ann Strickland Merritt
10/15/2005	Walt Baenziger
10/15/2005	Nancy Baenziger
10/15/2005	Athena Fox
10/15/2005	James Fox
10/15/2005	Hildegard Spielmann-Bergamini
10/16/2005	Linda Picceri
10/16/2005	Marla Blair
10/16/2005	Dennis Lyman
10/16/2005	E. Chipman Smith
10/16/2005	Edward J. Bauchiero
10/16/2005	Robert J. & Carol S. Nummy
10/16/2005	Louise A. Bergeron
10/17/2005	The Nature Conservancy, Massachusetts Chapter
10/17/2005	Margaret R. Bennett
10/17/2005	Lyle G. Maxwell
10/17/2005	Russell Historic Commission
10/17/2005	Cheryl Burns
10/17/2005	Thomas E. Burns
10/17/2005	Ronald J. Merritt, Town of Russell, Selectmen and Zoning Board
10/18/2005	Westfield River Watershed Association, Inc.
10/18/2005	Ruth Brown
10/18/2005	M. Bodoh
10/18/2005	Philip B. Bodoh
10/18/2005	Caitlyn Bodoh
10/18/2005	Dawne Piers-Gamble
10/18/2005	Frederick Bliss
10/18/2005	Linda L. Berry
10/18/2005	Gene Chague
10/18/2005	John L. Berry
10/18/2005	Sue Whalen
10/18/2005	Anthony J. Sarlan
10/18/2005	James Oleksak
10/18/2005	Dale Oleksak
10/18/2005	Russell Biomass, LLC
10/19/2005	Russell Biomass, LLC

10/19/2005	Katherine Malcovsky
10/19/2005	Kathy Furst
10/19/2005	John Paulmann
10/19/2005	Francine Caufield
10/19/2005	Bruce Masotti
10/19/2005	John M. Berry
10/19/2005	Department of Fish and Game, Riverways Program
10/19/2005	Marie Gould
10/19/2005	Daniel E. Coffey
10/19/2005	Darlene Meacham
10/19/2005	David W. Benoit
10/19/2005	Nancy Clancy
10/19/2005	William A. Long
10/19/2005	Evelyn Langtange
10/19/2005	Theresa Marciel-Carr
10/19/2005	Brent St. Louis
10/19/2005	Bill & June Babcock
10/19/2005	Arlene Deptula
10/19/2005	Jen Walker
10/19/2005	Alice E. Taverna, Russell Planning Board
10/19/2005	Robert J. Regish
10/19/2005	Ellen Daniels
10/19/2005	Bob Harris
10/19/2005	Barbara Bajurny
10/19/2005	Penny J. Mitchell
10/19/2005	Alexander Ware
10/19/2005	Gail Roberts
10/19/2005	David S. Glater
10/19/2005	Leigh C. Desmarais
10/19/2005	Ruth & Paul LaPrise
10/19/2005	James E. Fox
10/20/2005	Westfield River Wild & Scenic Advisory Committee
10/20/2005	Dale M. Rogers
10/20/2005	Howard F. R. Mason
10/20/2005	Hildegard Spielmann-Bergamini
10/20/2005	Mark Rawson
10/20/2005	William F. Carney
10/20/2005	Steve Cross
10/20/2005	William P. Kelly
10/20/2005	Adam D. Sacks
10/20/2005	Andrew Canellos
10/20/2005	Elaine T. Mastroianni
10/20/2005	Laurent P. Lambert
10/20/2005	Pioneer Valley Planning Commission
10/20/2005	William B. Hull, Hull Forest Products, Inc.
10/20/2005	James M. Ramsey

10/20/2005	Kathi Cotugno
10/20/2005	Janice Malcovsky
10/20/2005	Leo J. Blake
10/20/2005	William A. Hardie
10/21/2005	Massachusetts Division of Fisheries and Wildlife, Natural Heritage and Endangered Species Program
10/21/2005	Darlene Klaubert
10/21/2005	John Schoenrock
10/21/2005	Duane Pray
10/21/2005	Sheila Farrar
10/21/2005	Ellen J. Shaw
10/21/2005	Melanie Starr
10/21/2005	Ellen Moyer
10/21/2005	Robert W. & Ethel E. Tippet
10/21/2005	Russell Biomass, LLC
10/21/2005	Kate Pighetti
10/21/2005	John Baush
10/21/2005	Amy Porter
10/21/2005	Dennis M. Moran, Town of Russell, Board of Selectmen
10/21/2005	Amy Starr
10/21/2005	Jack & Judy Klaubert
10/21/2005	Lisa Renkowic
10/21/2005	Massachusetts Historical Commission
10/21/2005	Michelle Muszynski
10/21/2005	Aaron LaBrecque
10/21/2005	Jean E. Pescitelli
10/21/2005	Nicole Markel
10/21/2005	Don Podolski
10/21/2005	George Baush
10/21/2005	Henry R. Lafleur
10/21/2005	George & Sandra Haas
10/21/2005	Jay Judge
10/21/2005	Mr. & Mrs. D. Muszynski
10/22/2005	James & Beverly Crawford
10/22/2005	Aline Euler
10/22/2005	Philip H. Shaw
10/22/2005	Leo J. Blake
10/22/2005	Maureen Freeman
10/22/2005	leakywaders@comcast.net
10/22/2005	Gregory Westcott
10/22/2005	Charles R. Peckham
10/22/2005	Ruth Ohayon
10/22/2005	Claudia & Mike Hurley
10/22/2005	Carolyn Fuller
10/22/2005	David R. Fuller
10/22/2005	Linda Warriner

10/22/2005	Laura Warriner
10/22/2005	Scott & Julie Loomis
10/23/2005	Northeast Sustainable Energy Association
10/23/2005	Nancy Mezger
10/23/2005	William Dougherty
10/23/2005	Tracy Carne
10/23/2005	Dagmar K. Leonard
10/23/2005	Kimberly M. Spies
10/23/2005	Carl Lafreniere
10/23/2005	Paula Westcott
10/23/2005	J. Kenneth Taylor
10/23/2005	Fawn Busby
10/23/2005	Thomas Condon
10/23/2005	Nancy Condon
10/23/2005	John P. Chicoine
10/23/2005	Ruth Kennedy
10/23/2005	Stanley J. Gula, Pioneer Valley Trout Unlimited
10/23/2005	Robert Maxey
10/23/2005	Dale M. Nicodemi
10/23/2005	Marc Hoechstetter, Massachusetts/Rhode Island Council, Trout Unlimited
10/24/2005	Watchdogs for an Environmentally Safe Town (WEST)
10/24/2005	Carol Lucardi
10/24/2005	Bill Lucardi
10/24/2005	Jennifer Abromowitz
10/24/2005	Roberta Stoddard
10/24/2005	Anthony J. Palazzo
10/24/2005	Jo-Anne M. Leja
10/24/2005	Jana Chicoine
10/24/2005	David W. Cherry
10/24/2005	Robin Unger
10/24/2005	Richard F. Bennett
10/24/2005	Representative Daniel F. Keenan, Third Hampden District
10/24/2005	Sheila A. Mizejewski
10/24/2005	Sybil K. Mizejewski
10/24/2005	Walt Baeziger
10/24/2005	Joe Cembura
10/24/2005	Francis P. Siska
10/24/0005	J. Iltyd Fernandez-Sierra
10/24/2005	George & Dott Martin
10/24/2005	Jim Parker
10/24/2005	Agma M. Sweeney
10/24/2005	Raymond Miller
10/24/2005	Nicholas P. & Pamela Coe
10/24/2005	Elisa Campbell, Pioneer Valley Group, Sierra Club
10/24/2005	Mary Jo Litchard
10/24/2005	Dave Nicodemi

10/24/2005 Deirdre H. Maxey
10/24/2005 Jim Unger
10/24/2005 Kirt Mayland, Trout Unlimited
10/24/2005 Phil LaBranche, Citizens for Renewable Energy
10/24/2005 Sue Innarelli
10/24/2005 Christopher Davis
10/24/2005 Jack Swiatek
10/24/2005 Toxics Action Center
10/24/2005 Mark A. Noonan, Westfield City Council
10/24/2005 Connecticut River Watershed Council
10/24/2005 Laurie A. Protono
10/24/2005 Howard Marcil
10/24/2005 National Marine Fisheries Service
10/24/2005 Connecticut River Atlantic Salmon Commission
10/24/2005 Mass Audubon
10/24/2005 Michael R. Knapik, State Senator, 2nd Hampden and Hampshire District
10/24/2005 Department of Environmental Protection, Western Regional Office
10/24/2005 Nancy J. Banas
10/24/2005 Susanne H. Tarris
10/24/2005 Jean Carpenter
10/24/2005 Stephen Morawski
10/24/2005 Sylvie Mieziowski
10/24/2005 Karen Bouquillon
10/24/2005 Carla & Jim Ford
10/24/2005 Terence Connolly
10/25/2005 Deb Bowman
10/24/2005 Nicole Unger
10/24/2005 Carla Ford
10/24/2005 John R. & Ruth E. Chicoine
10/25/2005 Jonathan Long
10/25/2005 Rick Maciovowski
10/25/2005 Eileen Brown
10/27/2005 Kellie Burke

SRP/BA/ba